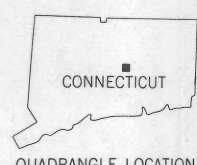
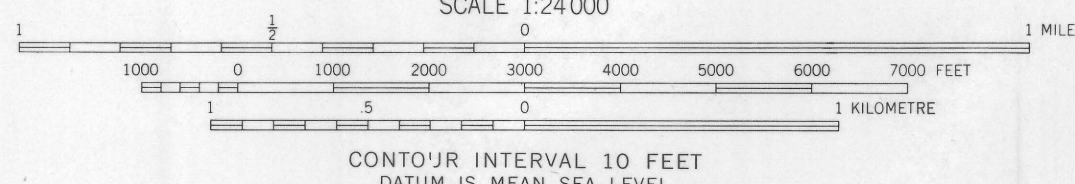
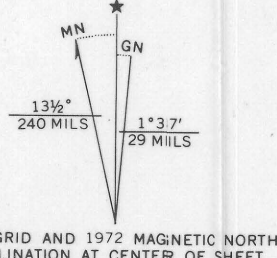




Base from U.S. Geological Survey, 1964

10,000-foot grid based on Connecticut
coordinate system. 1,000-metre
Universal Transverse Mercator grid
ticks, zone 18

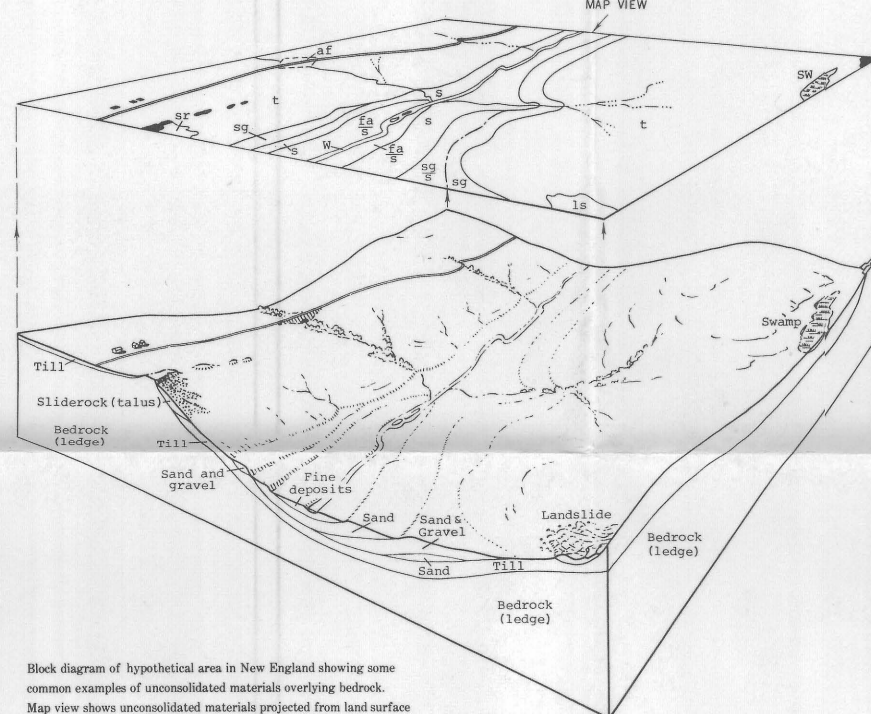


Textures mapped by W.H. Langer, 1973

This map describes the type, thickness, and distribution of unconsolidated materials. It is intended to serve as an aid in reconnaissance evaluation, areal planning, and areal identification of potential economic deposits.

THIS MAP SHOULD NOT BE USED AS A SUBSTITUTE FOR ONSITE INVESTIGATION.

The map shows the distribution of particle sizes of the first materials of a significant thickness (generally greater than 3 feet (1 m) occurring beneath the soil layer. The soil layer, commonly one or two feet (about 0.5 m) thick, is not mapped. *Bedrock (ledge)* is shown only where it is at or very near the land surface. Bedrock underlies the entire map area at various depths beneath the unconsolidated material (Ryder and Handman, 1974). Information on the types of bedrock in this quadrangle is shown on the bedrock map by Herz (1955). *Till (hardpan)* forms the mapped surface over large areas. In most parts of the quadrangle, it underlies the other unconsolidated materials. *Stratified deposits* are composed of gravel, sand, silt, clay, and organic matter. They occur in layers, and overlie till and (or) bedrock in most of the map area. Stratified deposits at the surface are often underlain by stratified materials of different texture. These underlying materials have been shown on the map where they are known or inferred to occur. For example, the symbol *s/t* indicates that sand is underlain by very fine sand, silt, and clay. The diagram below shows the vertical relationships often encountered in unconsolidated materials in New England.



Block diagram of hypothetical area in New England showing some common examples of unconsolidated materials overlying bedrock. Map view shows unconsolidated material projected from land surface.

Most unconsolidated materials are mixtures of the three particle-size classes defined in the diagram below. Coarse particles (stones) include granules, pebbles, cobbles, and boulders. Medium particles include all sand sizes except very fine sand. Fine particles include very fine sand, silt, and clay-sized particles.

PARTICLE-SIZE CLASSIFICATION USED IN THIS MAP									
Modified from Wentworth (1922)									
Number of particles per 256	2.5	16	64	256	1,024	4,096	16,384	65,536	262,144
Gravel-sized particles									
Coarse									
Medium									
Fine									
Sand-sized particles									
Very coarse									
Coarse									
Medium									
Fine									
Very fine									
Silt									
Clay									

Materials mapping involves a visual estimate of particle-size distribution by a field geologist. Percentages of particle sizes may, therefore, differ somewhat in places from the limits defined in the map units below. Map units may also contain small lenses of material that differ in particle size from the main deposit.

EXPLANATION

g

GRAVEL

Particle sizes range from 100 percent coarse particles to 50 percent coarse and 50 percent medium particles. Materials may occur as layers of well to poorly sorted gravel, or as layers of gravel interbedded with layers of sand; may also contain minor amounts of fine particles

sg / sg_a

SAND AND GRAVEL DEPOSITS

Particle sizes range from 50 percent coarse and 50 percent medium particles to 25 percent coarse and 75 percent medium particles. May also contain minor amounts of fine particles. Material may occur as:
(1) thin layers of well to poorly sorted sand interbedded with thin layers of well to poorly sorted gravel.
(2) distinct pockets of well to poorly sorted sand, gravel, and sand and gravel.
(3) poorly sorted mixed layers of sand and gravel.

sg, undifferentiated sand and gravel deposits
sg_a, deposits of river alluvium, consisting mostly of sand and gravel with some organic material; may also contain fine particles

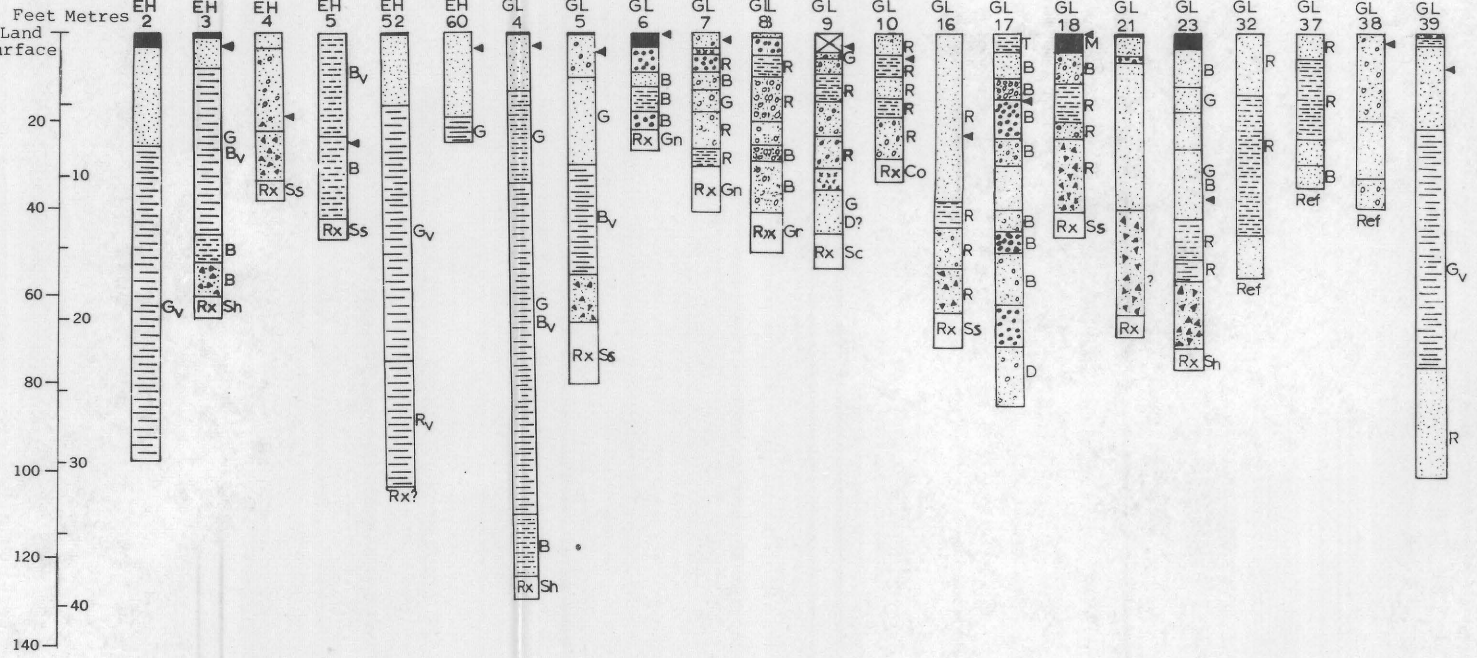
s / s_a

SAND DEPOSITS

Particle sizes range from 25 percent coarse particles and 75 percent medium particles, through 100 percent medium particles, to 50 percent medium particles and 50 percent fine particles

s, sand deposits commonly occurring as well to poorly sorted layers of varying thickness
s_a, deposits of river alluvium, consisting mostly of sand with some organic material; may also contain fine particles and scattered coarse particles

LOGS OF SELECTED TEST HOLES



EXPLANATION

Test hole EH East Hartford number GL Glastonbury
Soil loam, or
Muck
Gravel
Sand and gravel
Sand with scattered pebbles
Sand
Clay
V. varved
Boulder, cored
Till
Bedrock
Ref. Drill refusal
Color of sample
B Brown
G Gray
R Reddish-brown
T Tan
Bedrock type
Co Conglomerate
G Gravel
Gr Granite
S Siltstone
Sh Sandstone
D Decomposed rock
? Identification uncertain
* Water table—date of observation not known

MAP SHOWING UNCONSOLIDATED MATERIALS, GLASTONBURY QUADRANGLE, CONNECTICUT

By
William H. Langer
1976